

in other common carrier services. Frequencies in the 2596-2644 MHz band are shared with Instructional Television Fixed Service Stations licensed under Part 74 of the Commission's Rules. The response channels E1, E2, F1, and F2 listed in Sec. 74.939(d) of this chapter are grandfathered for fixed stations in this band and are shared with Instructional Television Fixed Service Stations licensed under part 74 of the Commission's rules; the existing response channels E3, E4, F3, and F4 listed in Sec. 74.939(d) of this chapter are grandfathered and licensed under this part 21.

\* \* \* \* \*

(e) Frequencies in the band segments 18,580-18,820 MHz and 18,920-19,160 MHz are available for assignment to fixed stations in this service for a point-to-point return links from a subscriber's location. Assignments in the 18 GHz band for these return links will be made in accordance with the provisions of Subpart I of Part 101.

\* \* \* \* \*

32. Section 21.902 is amended by revising paragraphs (c)(1)(ii), (c)(2)(i), (c)(2)(ii) and (f)(3) to read as follows:

**§ 21.902 Frequency interference.**

\* \* \* \* \*

(c) \* \* \*

(ii) if the great circle path between the applicant's proposed transmitter and the protected service area of any authorized, or previously-proposed, cochannel or adjacent-channel station(s) is within 241.41 km (150 miles) or less and 90 percent or more of the path is over water or within 16.1 km (10 miles) of the coast or shoreline of the Atlantic Ocean, the Pacific Ocean, the Gulf of Mexico, any of the Great Lakes, or any bay associated with any of the above (see Secs. 21.901(a) and 74.902 of this chapter);

(2)(i) One map, folded to an 8 1/2 x 11 inch (21.6 cm x 27.9 cm) size, identifying the boundaries of the protected service areas of each authorized or previously-proposed cochannel station with transmitter site coordinates within 160.94 km (100 miles) of the coordinates of the applicant's proposed transmitter site, and the 45 dB desired signal to undesired signal contour line of the applicant's proposed MDS station for cochannel stations; and

(ii) A second map, folded to an 8 1/2 x 11 inch (21.6 cm x 27.9 cm) size, identifying the boundaries of the protected service areas of each authorized or previously-proposed adjacent-channel station with transmitter site coordinates within 160.94 km (100 miles) of the coordinate of the applicant's proposed transmitter site, and the 0 dB desired signal to undesired signal contour line of the applicant's proposed MDS station for adjacent-channel stations (see 47 CFR 21.902(d));

\* \* \* \* \*

(f) \* \* \*

(3) For purposes of this section all interference calculations involving receive antenna performance shall use the reference antenna characteristics shown in figure 1.

[ ...Illustration appears here... ]

Figure I. Radiation Pattern Envelope for Reference Receive Antenna  
(21.902 (f)(3))

\* \* \* \* \*

33. Section 21.903 is amended by revising paragraph (a) to read as follows:

**§ 21.903 Purpose and permissible service.**

(a) Multipoint Distribution Service stations are generally intended to provide one-way radio transmission (usually in an omnidirectional pattern) from a stationary transmitter to multiple receiving facilities located at fixed points. When service is provided on a common carrier basis, subscriber supplied information is transmitted to points designated by the subscriber. When service is provided on a non-common carrier basis, transmissions may include information originated by persons other than the licensee, licensee- manipulated information supplied by other persons, or information originated by the licensee. Point-to-point radio return links from a subscriber's location to a MDS operator's facilities may be authorized in the 18,580 through 18,820 MHz and 18,920 through 19,160 MHz bands. Rules governing such operation are contained in Subpart I of Part 101, the Point-to-Point Microwave Radio Service.

\* \* \* \* \*

IV. Part 94 of Chapter 1 of Title 47 of the Code of Federal Regulations is removed and reserved for future use.

V. Part 101 of Chapter 1 of Title 47 of the Code of Federal Regulations is added to read as follows:

**PART 101**

**FIXED MICROWAVE SERVICES**

**Subpart A—General**

Sec.

101.1 Scope and authority.

101.3 Definitions.

**Subpart B—Applications and Licenses**

**General Filing Requirements**

101.5 Station authorization required.

101.7 Eligibility for station license.

101.9 Formal and informal applications.

101.11 Filing of applications, fees, and number of copies.

- 101.13 Application forms and requirements for private operational fixed stations.
- 101.15 Application forms for common carrier fixed stations. licenses.
- 101.17 [Reserved]
- 101.19 General application requirements.
- 101.21 Technical content of applications.
- 101.23 Waiver of rules.
- 101.25 Inconsistent or conflicting applications.
- 101.27 Repetitious applications.
- 101.29 Amendment of pending applications.
- 101.31 Special temporary authority.
- 101.33 Who may sign applications.

### **Processing of Applications**

- 101.35 Preliminary processing of applications.
- 101.37 Public notice period.
- 101.39 Dismissal and return of applications.
- 101.41 Ownership changes and agreements to amend or dismiss applications or pleadings.
- 101.43 Opposition to applications.
- 101.45 Mutually exclusive applications.
- 101.47 Consideration of applications.
- 101.49 Grants by random selection.
- 101.51 Comparative evaluation of mutually exclusive applications.

### **License Transfers, Modifications, Conditions and Forfeitures**

- 101.53 Assignment or transfer of station authorization.
- 101.55 Considerations involving transfer or assignment applications.
- 101.57 Modification of station license.
- 101.59 Processing of applications for facility minor modifications.
- 101.61 Certain modifications not requiring prior authorization.
- 101.63 Period of construction; certification of completion of construction.
- 101.65 Forfeiture and termination of station authorizations.
- 101.67 License period.
- 101.69 Transition of the 2.11-2.13 and 2.16-2.18 GHz bands from Common Carrier Fixed Radio Services and the 1.85-1.99, 2.13-2.15, and 2.18-2.20 GHz bands from Private Operational Fixed Microwave Radio Service to emerging technologies.

### **Subpart C—Technical Standards**

- 101.101 Frequency availability.
- 101.103 Frequency coordination procedures.
- 101.105 Interference protection criteria.
- 101.107 Frequency tolerance.
- 101.109 Bandwidth.
- 101.111 Emission limitations.
- 101.113 Transmitter power.

- 101.115 Directional antennas.
- 101.117 Antenna polarization.
- 101.119 Simultaneous use of common antenna structures.
- 101.121 Marking of antenna structures.
- 101.123 Quiet zones.
- 101.125 Temporary fixed antenna height restrictions.
- 101.127 Topographical data.
- 101.129 Transmitter location.
- 101.131 Transmitter construction and installation.
- 101.133 Limitations on use of transmitters.
- 101.135 Shared use of radio stations and the offering of private carrier service.
- 101.137 Interconnection of private operational fixed microwave stations.
- 101.139 Authorization of transmitters.
- 101.141 Microwave digital modulation.
- 101.143 Minimum path lengths for fixed links.
- 101.145 Interference to geostationary-satellites.

#### **Subpart D—Technical Operation**

- 101.201 Station inspection.
- 101.203 Communications concerning safety of life and property.
- 101.205 Operation during emergency.
- 101.207 Suspension of transmission.
- 101.209 Operation of stations at temporary fixed locations for communication between the United States and Canada or Mexico.
- 101.211 Operator requirements for private operational fixed stations.
- 101.213 Station identification.

#### **Subpart E—Miscellaneous**

- 101.301 National defense; free service.
- 101.303 Answers to notices of violation.
- 101.305 Discontinuance, reduction or impairment of service.
- 101.307 Tariffs, reports, and other material required to be submitted to the Commission.
- 101.309 Requirement that licensees respond to official communications.
- 101.311 Equal employment opportunities.

#### **Subpart F—Developmental Authorizations**

- 101.401 Eligibility.
- 101.403 Scope of service.
- 101.405 Adherence to program of research and development.
- 101.407 Special procedure for the development of a new service or for the use of frequencies not in accordance with the provisions of the rules in this part.
- 101.409 Terms of grant; general limitations.
- 101.411 Supplementary showing required.
- 101.413 Developmental report required.

### **Subpart G—Digital Electronic Message Service**

- 101.501 Eligibility.
- 101.503 Digital termination nodal stations.
- 101.505 Frequencies.
- 101.507 Frequency stability.
- 101.509 Interference protection criteria.
- 101.511 Purpose and permissible service.
- 101.513 Transmitter power.
- 101.515 Emissions and bandwidth.
- 101.517 Antennas.
- 101.519 Interconnection.
- 101.521 Spectrum utilization.

### **Subpart H—Private Operational Fixed Microwave Service**

- 101.601 Eligibility.
- 101.603 Permissible communications.
- 101.605 Frequencies.
- 101.607 Maximum authorized bandwidth.
- 101.609 Technical standards for stations authorized prior to July 1, 1976.

### **Subpart I—Point-to-Point Microwave Radio Service**

- 101.701 Eligibility.
- 101.703 Frequencies.
- 101.705 Transmitter power.
- 101.707 Bandwidth and emission limitations.
- 101.709 Modulation requirements.
- 101.711 Permissible communications.
- 101.713 Supplementary showing required with applications.
- 101.715 Stations at temporary fixed locations.
- 101.717 Notification of station operation at temporary fixed locations.
- 101.719 Renewal of station licenses.
- 101.721 Channel loading.
- 101.723 Special requirements for operation in the band 38.600-40.000 MHz.

### **Subpart J—Local Television Transmission Service**

- 101.801 Eligibility.
- 101.803 Frequencies.
- 101.805 Assignment of frequencies to mobile stations.
- 101.807 Transmitter power.
- 101.809 Bandwidth and emission limitations.
- 101.811 Modulation requirements.
- 101.813 Remote control operation of mobile television pickup stations.
- 101.815 Stations at temporary fixed locations.
- 101.817 Notification of station operation at temporary locations.
- 101.819 Stations affected by coordination contour procedures.

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## PART 101

### Subpart A – General

#### § 101.1 Scope and authority.

(a) The purpose of the rules in this part is to prescribe the manner in which portions of the radio spectrum may be made available for private operational and common carrier fixed microwave operations that require transmitting facilities on land or in specified offshore coastal areas within the continental shelf.

(b) The rules in this part are issued pursuant to the authority contained in Titles I through III of the Communications Act of 1934, as amended, which vest authority in the Federal Communications Commission to regulate common carriers of interstate and foreign communications, to regulate radio transmissions and issue licenses for radio stations, and to regulate all interstate and foreign communications by wire and radio necessary to the accomplishment of the purposes of the Act.

#### § 101.3 Definitions

**Antenna power gain.** The square of the ratio of the root-mean-square free space field intensity produced at one mile in the horizontal plane, in millivolts per meter for one kilowatt antenna input power to 137.6 mV/m. This ratio should be expressed in decibels (dB). (If specified for a particular direction, antenna power gain is based on the field strength in that direction only.)

**Antenna power input.** The radio frequency peak or RMS power, as the case may be, supplied to the antenna from the antenna transmission line and its associated impedance matching network.

**Antenna structure.** The antenna, its supporting structure and anything attached to it.

**Assigned frequency.** The center of the frequency band assigned to a station.

**Assigned frequency bandwidth.** The frequency band within which the emission of a station is authorized; the width of the band equals the necessary bandwidth plus twice the absolute value of the frequency tolerance.

**Authorized bandwidth.** The maximum bandwidth authorized to be used by a station as specified in the station license. (See § 2.202)

**Authorized frequency.** The frequency, or frequency range, assigned to a station by the Commission and specified in the instrument of authorization.

**Authorized power.** The maximum power a station is permitted to use. This power is specified by the Commission in the station's authorization.

**Bandwidth occupied by an emission.** The band of frequencies comprising 99 percent of the total radiated power extended to include any discrete frequency on which the power is at least 0.25 percent of the total radiated power.

**Bit rate.** The rate of transmission of information in binary (two state) form in bits per unit time.

**Carrier.** In a frequency stabilized system, the sinusoidal component of a modulated wave whose frequency is independent of the modulating wave; or the output of a transmitter when the modulating wave is made zero; or a wave generated at a point in the transmitting system and subsequently modulated by the signal; or a wave generated locally at the receiving terminal which when combined with the side bands in a suitable detector, produces the modulating wave.

**Carrier frequency.** The output of a transmitter when the modulating wave is made zero.

**Central office.** A landline termination center used for switching and interconnection of public message communication circuits.

**Communication common carrier.** Any person engaged in rendering communication service for hire to the public.

**Control point.** An operating position at which an operator responsible for the operation of the transmitter is stationed and which is under the control and supervision of the licensee.

**Control station.** A fixed station, the transmissions of which are used to control automatically the emissions or operations of a radio station, or a remote base station transmitter.

**Coordination area.** The area associated with a station outside of which another station sharing the same or adjacent frequency band neither causes nor is subject to interfering emissions greater than a permissible level.

**Coordination contour.** The line enclosing the coordination area.

**Coordination distance.** The distance on a given azimuth from a station beyond which another station neither causes nor is subject to interfering emissions greater than a permissible level.

**Digital Electronic Message Service.** A two-way end-to-end fixed radio service utilizing digital termination systems for the exchange of digital information. This service may also make use of point-to-point microwave facilities, satellite facilities or other communications media to interconnect digital termination systems to comprise a network.

**Digital modulation.** The process by which some characteristic (frequency, phase, amplitude or combinations thereof) of a carrier frequency is varied in accordance with a digital signal, e.g. one consisting of coded pulses or states.

**Digital Electronic Message Nodal Station.** A fixed point-to-multipoint radio station in a Digital Electronic Message Service providing two-way communication with Digital Electronic Message User Stations.

**Digital Electronic Message User Station.** Any one of the fixed microwave radio stations located at users' premises, lying within the coverage area of a Digital Electronic Message Nodal Station, and providing two-way digital communications with the Digital Electronic Message Nodal Station.

**Drop point.** A term used in the point-to-point microwave radio service to designate a terminal point where service is rendered to a subscriber.



**Earth station.** A station located either on the Earth's surface or within the major portion of Earth's atmosphere and intended for communication with one or more space stations or with one or more stations of the same kind by means of one or more reflecting satellites or other objects in space.

**Effective radiated power (ERP).** The product of the power supplied to the antennas and its gain relative to a half-wave dipole in a given direction.

**Equivalent Isotropically Radiated Power (EIRP).** The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

**Exchange.** A unit of a communication company or companies for the administration of communication service in a specified area, which usually embraces a city, town, or village and its environs, and consisting of one or more central offices, together with the associated plant, used in furnishing communication service in that area.

**Exchange area.** The geographic area included within the boundaries of an exchange.

**Fixed satellite earth station.** An earth station intended to be used at a specified fixed point.

**Fixed relay station.** A fixed station associated with one or more stations, established to receive radio signals directed to it and to retransmit them automatically on a fixed service frequency.

**Fixed Service.** A radiocommunications service between specified fixed points.

**Fixed station.** A station in the fixed service.

**Frequency tolerance.** The maximum permissible departure by the center frequency of the frequency band occupied by an emission from the assigned frequency or, by the characteristic frequency of an emission from the reference frequency.

**NOTE:** The frequency tolerance is expressed in parts in  $10^6$  or in hertz.

**General communication.** Two-way voice communication, through a base station, between (1) a common carrier land mobile or airborne station and a landline telephone station connected to a public message landline telephone system, or (2) two common carrier land mobile stations, or (3) two common carrier airborne stations, or (4) a common carrier land mobile station and a common carrier airborne station.

**Harmful interference.** Interference that endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with these Regulations.

**Intermodal link.** A point-to-point communications link used to provide communications between Nodal Stations or to interconnect Nodal Stations to other communications media.

**Landing area.** A landing area means any locality, either of land or water, including airports and intermediate landing fields, which is used, or approved for use for the landing and take-off of aircraft, whether or not facilities are provided for the shelter, servicing, or repair of aircraft, or for receiving or discharging passengers or cargo.

**Local television transmission service.** A public radio communication service for the transmission of television material and related communications.

**Long haul system.** A microwave system licensed under this Part in which the longest radio circuit of tandem radio paths exceeds 402 kilometers (250 miles).

**Master station.** A station in a multiple address radio system that controls, activates or interrogates four or more remote stations. Master stations performing such functions may also receive transmissions from remote stations.

**Message center.** The point at which messages from members of the public are accepted by the carrier for transmission to the addressee.

**Microwave frequencies.** As used in this part, this term refers to frequencies of 890 MHz and above.

**Microwave link.** A link is defined as a simplex communications circuit between two points utilizing a single frequency/polarization assignment. A duplex communications circuit would require two links, one link in each direction.

**Miscellaneous common carriers.** Communications common carriers that are not engaged in the business of providing either a public landline message telephone service or public message telegraph service.

**Mobile earth station.** An earth station intended to be used while in motion or during halts at unspecified points.

**Mobile Service.** A radiocommunication service between mobile and land stations or between mobile stations.

**Mobile station.** A station in the mobile service intended to be used while in motion or during halts at unspecified points.

**Multiple address system (MAS).** A point-to-multipoint radio communications system, either one-way or two-way, utilizing frequencies listed in Section 101.605 and serving a minimum of four unique remote stations. Each master station must serve at least its own four remotes operating on its assigned frequency. The remote stations must be scattered over the service area in such a way that two or more point-to-point systems would be needed to serve those remotes.

**Necessary bandwidth.** For a given class of emission, the width of the frequency band that is just sufficient to ensure the transmission of information at the rate and with the quality required under specified conditions. The necessary bandwidth may be calculated using the formulas in § 2.202 of this Chapter.

**Nodal station.** The central or controlling station in a radio system operating on point-to-multipoint frequencies in the 2.5, 10.6, or 18 GHz bands.

**Occupied bandwidth.** The width of a frequency bandwidth such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage,  $B/2$  of the total mean power of a given emission. Unless otherwise specified by the CCIR for the appropriate class of emission, the value of  $B/2$  should be taken as 0.5%.

Note: The percentage of the total power outside the occupied bandwidth is represented by B.

Operational fixed station. A private fixed station not open to public correspondence.

Passive repeater. A re-radiation device located in the far field of a transmitting/receiving antenna that re-directs intercepted radio frequency energy. For example, it may consist of a reflector(s) or back-to-back parabolic or horn antennas.

Periscope antenna system. An antenna system that re-directs intercepted radio frequency energy consisting of an active portion and a reflector which is located in the near field or transition field (i.e., within several hundred meters) of the active portion.

Point-to-point microwave radio service. A common carrier public radio service rendered on microwave frequencies by fixed and temporary fixed stations between points that lie within the United States or between points to its possessions or to points in Canada or Mexico.

Private carrier. An entity licensed in the private service and authorized to provide communications service to other private service eligibles on a commercial basis.

Private line service. A service whereby facilities for communication between two or more designated points are set aside for the exclusive use or availability for use of a particular customer and authorized users during stated periods of time.

Public correspondence. Any telecommunication which the offices and stations must, by reason of their being at the disposal of the public, accept for transmission.

Public message service. A service whereby facilities are offered to the public for communication between all points served by a carrier or by interconnected carriers on a non-exclusive message by message basis, contemplating a separate connection for each occasion of use.

Radio station. A separate transmitter or a group of transmitters under simultaneous common control, including the accessory equipment required for carrying on a radiocommunication service.

Radiocommunication. Telecommunication by means of radio waves.

Rated power output. The maximum radio frequency power output capability (peak or average power) of a transmitter, under optimum conditions of adjustment and operation, specified by its manufacturer.

Record communication. Any transmission of intelligence which is reduced to visual record form at the point of reception.

Reference frequency. A frequency coinciding with or having a fixed and specified relation to the assigned frequency. This frequency does not necessarily correspond to any frequency in an emission.

Relay station. A fixed station used for the reception and retransmission of the signals of another station or stations.

Remote station. A fixed station in a multiple address radio system that transmits one-way to

one or more central receive sites, controls a master station, or is controlled, activated or interrogated by, and may respond to, a master station.

**Repeater station.** A fixed station established for the automatic retransmission of radiocommunications received from one or more mobile stations and directed to a specified location; for public mobile radio operations, a fixed station that automatically retransmits the mobile communications and/or transmitter information about the base station, along a fixed point-to-point link between the base station and the central station.

**Short haul system.** A microwave system licensed under this Part in which the longest radio circuit of tandem radio paths does not exceed 402 kilometers (250 miles).

**Signaling communication.** One-way communications from a base station to a mobile or fixed receiver, or to multi-point mobile or fixed receivers by audible or subaudible means, for the purpose of actuating a signaling device in the receiver(s) or communicating information to the receiver(s), whether or not the information is to be retained in record form.

**Standby transmitter.** A transmitter installed and maintained for use in lieu of the main transmitter only during periods when the main transmitter is out of service for maintenance or repair.

**Symbol rate.** Modulation rate in bauds. This rate may be higher than the transmitted bit rate as in the case of coded pulses or lower as in the case of multilevel transmission.

**Telegraphy.** A form of telecommunication which is concerned in any process providing transmission and reproduction at a distance of documentary matter, such as written or printed matter or fixed images, or the reproduction at a distance of any kind of information in such a form. Unless otherwise specified, telegraphy means a form of telecommunication for the transmission of written matter by the use of signal code.

**Telemetry.** The use of telecommunication for automatic indicating or recording measurements at a distance from the measuring instrument.

**Telephony.** A form of telecommunication set up for the transmission of speech, or in some cases, other sounds.

**Television.** A form of telecommunication for transmission of transient images of fixed or moving objects.

**Temporary fixed station.** A station established in a non-permanent mode (temporary) at a specified location for a short period of time, ranging up to one year. Temporary-fixed operations are itinerant in nature, and are not to be confused with mobile-type operations.

**Video entertainment material.** The transmission of a video signal (e.g. United States Standard Monochrome or National Television Systems Committee 525-line television) and an associated audio signal which is designed primarily to amuse or entertain, such as movies and games.

## **Subpart B: Applications and Licenses**

### **GENERAL FILING REQUIREMENTS**

#### **§ 101.5 Station authorization required.**

(a) No radio transmitter shall be operated in this service except under and in accordance with a proper station authorization granted by the Federal Communications Commission. Except as provided in paragraph (d) of this section, no construction or modification of a station may be commenced without an authorization from the Commission.

(b) A separate application form must be filed for each Digital Electronic Message Service Nodal Station. No license is required for a Digital Electronic Message User Station. Authority for a Digital Electronic Message Nodal Station licensee to serve a specific number of user stations to be licensed in the name of the carrier must be requested on FCC Form 494 filed for the Digital Electronic Message Nodal Station.

(c) If construction and or operation may have a significant environmental impact as defined by Sec. 1.1307 of the Commission's rules, the requisite environmental assessment as prescribed in Sec. 1.1311 of this chapter must be filed with the application and Commission environmental review must be completed before construction of the station is initiated. See § 1.1312 of this chapter.

(d) For stations authorized under Subpart H (Private Operational Fixed Radio Service), construction, but not operation, of new or modified stations may be initiated prior to grant of an authorization.

#### **§ 101.7 Eligibility for station license.**

(a) A station license may not be granted to or held by a foreign government or by a representative of a foreign government.

(b) In the Common Carrier service, a station license may not be granted or held by:

- (1) Any alien or the representative of any alien.
- (2) Any corporation organized under the laws of any foreign government.
- (3) Any corporation of which any officer or director is an alien.
- (4) Any corporation of which more than one-fifth of the capital stock is owned of record or voted by: aliens or their representatives; a foreign government or representatives thereof; or any corporation organized under the laws of a foreign country.
- (5) Any corporation directly or indirectly controlled by any other corporation of which any officer or more than one-fourth of the directors are aliens, if the Commission finds that the public interest will be served by the refusal or revocation of such license.
- (6) Any corporation directly or indirectly controlled by any other corporation of which

more than one-fourth of the capital stock is owned of record or voted by aliens or their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign government, if the Commission finds that the public interest will be served by the refusal or revocation of such license.

#### § 101.9 Formal and informal applications.

(a) Except for an authorization under any of the proviso clauses of section 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a)), the Commission will grant the following authorizations only upon written application: Station licenses; modifications of station licenses; renewals of station licenses; extensions of time to construct; transfers and assignments of station licenses or of any rights thereunder.

(b) Except as may be otherwise permitted by this Part, a separate written application must be filed for each instrument of authorization requested. Applications may be:

(1) "Formal applications" where the Commission has prescribed in this part a standard form; or

(2) "Informal applications" (normally in letter form) where the Commission has not prescribed a standard form.

(c) An informal application will be accepted for filing only if:

(1) A standard form is not prescribed or clearly applicable to the authorization requested;

(2) It is a document submitted, in duplicate, with a caption which indicates clearly the nature of the request, radio service involved, location of the station, and the application file number (if known); and

(3) It contains all the technical details and informational showings required by the rules and states clearly and completely the facts involved and authorization desired.

#### § 101.11 Filing of applications, fees, and number of copies.

(a) Part 1 of this chapter contains information on application filing procedures and requirements for all services authorized under this Part. All filings must include the original application plus one copy.

(b) Applications or filings requiring fees as set forth at Part 1, Subpart G of this chapter must be filed in accordance with Sec. 0.401(b) of this chapter. Applications or filings not requiring fees must be submitted to: Federal Communications Commission, Common Carrier Radio Services, 1270 Fairfield Road, Gettysburg, PA 17325.

(c) All correspondence or amendments concerning a submitted application must clearly identify the radio service, the name of the applicant, station location, and the Commission file number (if known) or station call sign of the application involved.

(d) Except as otherwise specified, all applications, amendments, and correspondence must be signed as prescribed by Part 1 of this Chapter.

§ 101.13 Application forms and requirements for private operational fixed stations.

(a) A separate application must be submitted on FCC Form 402 for the following:

- (1) New station authorization for private operational fixed microwave station.
- (2) New authorization to operate one or more fixed stations at temporary locations in this service.
- (3) Modification of station license.
- (4) New station authorization or modification of license for each master station of a system consisting of a master station and its associated remote stations.
- (5) The Commission's consent to the assignment of an authorization to another person or entity. In addition, the application must be accompanied by a signed letter from proposed assignor stating the desire to assign all right, title, and interest in and to such authorization, stating the call sign and location of the station, and that the assignor will submit its current station authorization for cancellation upon completion of the assignment. Form 1046 may be used in lieu of this letter.

(b) An application for authority to operate a fixed station at temporary locations must specify the precise geographic area within which the operation will be confined. The area specified must be defined as a radius of operation about a given latitude/longitude or as a rectangular area bounded by upper and lower lines of latitude and longitude. Exception to this specific requirement may be made for exceptionally large areas, such as the continental United States. Sufficient data must be submitted to show the need for the proposed area of operation.

(1) If an operational-fixed station is authorized to be operated at temporary locations and actually remains, or is to remain, at the same location for a period of over a year, application for a permanent authorization specifying the fixed location must be made as soon as possible but not later than 30 days after the expiration of the one-year period.

(2) Operation of a fixed station at temporary locations will be authorized only on the frequency pair 6535/6575 MHz, and in frequency bands shared for operational fixed and mobile operations.

(c) A separate application form for point-to-multipoint frequencies in the 10.6 GHz and 18 GHz bands must be filed for each Nodal Station except for operations consistent with § 101.605(l)(3). Each Nodal Station application must specify the service area that will be served by the station in terms of a distance radius or other geographical specification, and, if applicable, the Standard Metropolitan Statistical Area (SMSA) being served.

(d) Application for renewal of station licenses must be submitted on such form as the Commission may designate by public notice. Applications for renewal must be made during the license term and should be filed within 90 days, but not later than 30 days, prior to the end of the license term. When a licensee submits a timely application for renewal of a station license, the existing license for that station will continue as a valid authorization until the Commission has made a final decision on the application.

(e) A separate application must be filed for each fixed master station in a Multiple Address System (MAS). Applications may include any number of remote stations in a single application, but must specify the geographic service area in which these remote stations will

be located. Applications for mobile operations or for systems employing only remote stations must designate a reference point (set of coordinates) at or near the center of the area being served.

§ 101.15 Application forms for common carrier fixed stations.

(a) New or modified facilities. FCC Form 494 must be submitted and a license granted for each station prior to commencement of any proposed station construction. FCC Form 494 also must be submitted to amend any license application, to modify any license pursuant to §§ 101.57(a) and 101.59, and to notify the Commission of modifications made pursuant to § 101.61. Cancellation of a license can be made by letter.

(b) Certification of completion of construction. FCC Form 494A must be submitted to certify completion of construction.

(c) Additional time to construct. FCC Form 701 ("Application for Additional Time to Construct Radio Station") must be filed prior to the expiration of the time for construction noted in a license to modify the license by extending the period of construction.

(d) Renewal of station license. Except for renewal of special temporary authorizations, FCC Form 405 ("Application for Renewal of Station License") must be filed by the licensee between thirty (30) and sixty (60) days prior to the expiration date of the license sought to be renewed. Whenever a group of station licenses in the same radio service are to be renewed simultaneously, a single "blanket" application may be filed to cover the entire group if the application identifies each station by call sign and station location. Applicants should note also any special renewal requirements under the rules for each radio service.

(e) Assignment of license. FCC Form 702 ("Application for Consent to Assignment of Radio Station Construction Authorization or License for Stations in Services Other than Broadcast") must be submitted to assign voluntarily (as by, for example, contract or other agreement) or involuntarily (as by, for example, death, bankruptcy, or legal disability) the station authorization. In the case of involuntary assignment (or transfer of control) the application must be filed within 10 days of the event causing the assignment (or transfer of control). FCC Form 702 must also be used for non-substantial (pro forma) assignments. In addition, FCC Form 430 ("Licensee Qualification Report") must be submitted by the proposed assignee unless such assignee has a current and substantially accurate report on file with the Commission. Whenever a group of station licenses in the same radio services are to be assigned to a single assignee, a single "blanket" application may be filed to cover the entire group, if the application identifies each station by call sign and station location. The assignment must be completed within 45 days from the date of authorization. Upon consummation of an approved assignment, the Commission must be notified by letter of the date at consummation within 10 days of its occurrence.

(f) Partial assignment of license. Authorization for assignment from one company to another of only a part or portions of the facilities (transmitters) authorized under an existing license (as distinguished from an assignment of the facilities in their entirety) may be granted upon application:

(1) By the assignor on FCC Form 494 for deletion of the assigned facilities (no fee required).

(2) By the assignee on FCC Form 494 with a request for recertification in the name of the assignee for frequencies eliminated from assignor's license (fee required).



The assignment must be consummated within 45 days from the date of authorization. In the event that consummation does not occur, FCC Form 494 must be submitted to return the assignor's license to its original condition.

(g) Transfer of control of corporation holding a conditional license or license. FCC Form 704 ("Application for Consent to Transfer of Control") must be submitted in order to voluntarily or involuntarily transfer control (de jure or de facto) of a corporation holding any conditional licenses or licenses. FCC Form 704 must also be used for non-substantial (pro forma) transfers of control. The transfer must be completed within 45 days from the date of authorization. Upon consummation of an approved transfer, the Commission must be notified by letter of the date of consummation within 10 days of its occurrence. Applicant may request extension of time to consummate by submitting an informal request within 10 days of date expiration of authorization.

(h) Licensee qualifications. FCC Form 430 ("Licensee Qualification Report") must be filed annually, no later than March 31 for the end of the preceding calendar year, by licensees for each common carrier radio service authorized under this part, if service was offered at any time during the preceding year. Each annual filing must include all changes of information required by FCC Form 430 that occurred during the preceding year. In those cases in which there has been no change in any of the required information, the applicant or licensee, in lieu of submitting a new form, may so notify the Commission by letter.

§ 101.17 [Reserved]

§ 101.19 General application requirements.

(a) Each application for a license or for consent to assignment or transfer of control must:

(1) Disclose fully the real party (or parties) in interest, including (as required) a complete disclosure of the identity and relationship of those persons or entities directly or indirectly owning or controlling (or both) the applicant;

(2) Demonstrate the applicant's legal, technical, and other qualifications to be a licensee;

(3) Submit the information required by the Commission's Rules, requests, and application forms;

(4) Be maintained by the applicant substantially accurate and complete in all significant respects in accordance with the provisions of Sec. 1.65 of this chapter; and

(5) Show compliance with the special requirements applicable to each radio service and make all special showings that may be applicable (e.g., those required by §§ 101.103(d), 101.701, 101.713 and of this part, etc.).

(b) In addition to the general application requirements of §§ 101.19 and 101.21 of this part, applicants must submit any additional documents, exhibits, or signed written statements of fact:

(1) As may be required by the other parts of the Commission's Rules, and the other subparts of this part (particularly Subpart C and those subparts applicable to the specific radio

service involved); and

(2) As the Commission, at any time after the filing of an application and during the term of any authorization, may require from any applicant, permittee, or licensee to enable it to determine whether a radio authorization should be granted, denied, or revoked.

(c) All applicants are required to indicate at the time their application is filed whether an authorization of the facilities is categorically excluded as defined by § 1.1306 of the Commission's rules. If answered affirmatively, an Environmental Assessment as described by § 1.1311, need not be filed with the application.

#### § 101.21 Technical content of common carrier applications.

Applications must contain all technical information required by the application form and any additional information necessary to fully describe the proposed facilities and to demonstrate compliance with all technical requirements of the rules governing the radio service involved (see Subparts C, F, G, I, and J, as appropriate). The following paragraphs describe a number of technical requirements.

(a) Each application proposing a new or modified antenna structure for a station (including a receive-only or passive repeater) must include a copy of the FAA "no hazard determination" if FAA notification is required by Part 17 of this chapter. Complete information as to rules concerning the construction, marking and lighting of antenna structures is contained in Part 17 of this chapter. See also Sec. 101.121 if the structure is used by more than one station.

(b) Each application for construction permit for a developmental authorization must be accompanied by pertinent supplemental information as required by Sec. 101.411 in addition to such information as may be specifically required by this section.

(c) Each application in the Point-to-Point Radio, Local Television Transmission, and Digital Electronic Message Service (excluding user stations) proposing a new or replacement antenna (excluding omnidirectional antennas) must include an antenna radiation pattern showing the antenna power gain distribution in the horizontal plane expressed in decibels, unless such pattern is known to be on file with the Commission in which case the applicant may reference in its application the FCC-ID number that indicates that the pattern is on file with the Commission.

#### § 101.23 Waiver of rules.

Waivers of these rules may be granted upon application or on the Commission's own motion. A request for waiver shall contain a statement of reasons sufficient to justify a waiver. A waiver will not be granted except upon an affirmative showing that:

(a) The underlying purpose of the rule will not be served, or would be frustrated, by its application in the particular case, and that grant of the waiver is otherwise in the public interest; or

(b) The unique facts and circumstances of a particular case render application of the rule inequitable, unduly burdensome or otherwise contrary to the public interest. Applicants must also show the lack of a reasonable alternative.

#### § 101.25 Inconsistent or conflicting applications.

While an application is pending and undecided, no subsequent inconsistent or conflicting

application may be filed by the same applicant, the applicant's successor or assignee, or on behalf or for the benefit of the same applicant, the applicant's successor or assignee.

§ 101.27 Repetitious applications.

(a) Where an applicant has been afforded an opportunity for a hearing with respect to a particular application for a new station, or for an extension or enlargement of a service or facilities, and the Commission has, after hearing or default, denied the application or dismissed it with prejudice, the Commission will not consider a like application involving service of the same kind to the same area by the same applicant, or by the applicant's successor or assignee, or on behalf of or for the benefit of the original parties in interest, until after the lapse of 12 months from the effective date of the Commission's order. The Commission may, for good cause shown, waive the requirements of this section.

(b) Where an appeal has been taken from the action of the Commission denying a particular application, another application for the same class of station and for the same area, in whole or in part, filed by the same applicant or by the applicant's successor or assignee, or on behalf or for the benefit of the original parties in interest, will not be considered until the final disposition of such appeal.

§ 101.29 Amendment of pending applications.

(a) Any pending application may be amended as a matter of right if the application has not been designated for hearing, or for comparative evaluation pursuant to § 101.51, or for the random selection process, provided, however, that the amendments must comply with the provisions of § 101.41 as appropriate.

(b) Requests to amend an application designated for hearing or for comparative evaluation, or tentatively selected by the random selection process may be granted only if a written petition demonstrating good cause is submitted and properly served upon the parties of record.

(c) The Commission will classify amendments on a case-by-case basis. Whenever previous amendments have been filed, the most recent amendment will be classified by reference to how the information in question stood as of the latest Public Notice issued which concerned the application. An amendment will be deemed to be a major amendment subject to Sec. 101.37 and Sec. 101.45 under any of the following circumstances:

(1) if the amendment results in a substantial modification of the engineering proposal such as (but not necessarily limited to):

(i) A change in, or an addition of a radio frequency channel;

(ii) A change in polarization of the transmitted signal;

(iii) An increase in the transmitter output power of three (3) dB or more in the Private Fixed, Point-to-Point, and Local Television Transmission Services;

(iv) A change in type of transmitter emission or an increase in emission bandwidth requiring a larger authorized bandwidth;

(v) A change in the geographic coordinates of a station's transmitting antenna of more than ten (10) seconds of latitude or longitude, or both;

(vi) A change of more than one (1) degree in the azimuth of the center of the main lobe of radiation of a point-to-point station's transmitting antenna (including any deflections by repeating devices);

(vii) Any change which increases the antenna center line height to a new height that would trigger a requirement for a new aeronautical study; or

(viii) Any changes or combination of changes which would cause harmful electrical interference to an authorized facility or result in a mutually exclusive conflict with another pending application; or

(ix) Any technical change that would increase the effective radiated power in any direction by more than one and one-half (1.5) dB in the Digital Electronic Message Service.

(2) If the amendment would convert a proposal, such that it may have a significant impact upon the environment under Sec. 1.1307 of the Commission's rules, which would require the submission of an environmental assessment, see Sec. 1.1311 of this chapter, and Commission environmental review, see Secs. 1.1308 and 1.1312 of this chapter.

(3) If the amendment results in a substantial and material alteration of the proposed service.

(4) If the amendment specifies a substantial change in beneficial ownership or control (*de jure* or *de facto*) of an applicant such that the change would require, in the case of an authorized station, the filing of a prior assignment or transfer of control application under section 310(d) of the Communications Act of 1934 [47 U.S.C. 310(d)]. Such a change would not be considered major where the assignment or transfer of control is for legitimate business purposes other than the acquisition of applications.

(5) If the amendment, or the cumulative effect of the amendment, is determined by the Commission otherwise to be substantial pursuant to section 309 of the Communications Act of 1934.

(d) The applicant must serve copies of any amendments or other written communications upon the following parties:

(1) Any applicant whose application appears on its face to be mutually exclusive with the application being amended, including those applicants originally served under § 101.509;

(2) Any applicant whose application has been found by the Commission, as published in a public notice, to be mutually exclusive with the application being amended; and

(3) Any party who has filed a petition to deny the application or other formal objection, when that petition or formal objection has not been resolved by the Commission.

(e) The Commission may waive the service requirements of paragraph (d) of this section and prescribe such alternative procedures as may be appropriate under the circumstances to protect petitioners' interests and to avoid undue delay in a proceeding, if an applicant submits a request for waiver which demonstrates that the service requirement is unreasonably burdensome. Requests for waiver must be served on petitioners. Oppositions to the petition may be filed within five (5) days after the petition is filed and must be served on the applicant.

Replies to oppositions will not be entertained.

(f) Any amendment to an application must be signed and must be submitted in the same manner, and with the same number of copies, as was the original application. Amendments may be made in letter form if they comply in all other respects with the requirements of this chapter.

§ 101.31 Special temporary authority.

(a) In circumstances requiring immediate or temporary use of facilities, request may be made for special temporary authority to install and/or operate new or modified equipment. Any such request may be submitted as an informal application in the manner set forth in Section 101.9 and must contain full particulars as to the proposed operation including all facts sufficient to justify the temporary authority sought and the public interest therein. No such request will be considered unless the request is received by the Commission at least 10 days prior to the date of proposed construction or operation or, where an extension is sought, expiration date of the existing temporary authorization.

(b) Special temporary authorization may be granted upon written request in the following circumstances:

- (1) In emergency situations;
- (2) to permit restoration or relocation of existing facilities to continue communication service;
- (3) to conduct tests to determine necessary data for the preparation of an application for regular authorization;
- (4) for a temporary, non-recurring service where a regular authorization is not appropriate;
- (5) in other situations involving circumstances which are of such extraordinary nature that delay in the institution of temporary operation would seriously prejudice the public interest.

(c) The Commission may grant requests for special temporary authority without issuing the public notice provided for in §1.962 of this chapter for periods not exceeding 180 days, if there are extraordinary circumstances supporting the request and where delay in commencing temporary operation would seriously prejudice the public interest. Requests for special temporary authorization not involving extraordinary circumstances may be granted without public notice for a period of 30 days where an application for regular operation is not contemplated or for 60 days pending or after the filing of an application for regular operation.

(d) Request for special temporary authority must contain the following information:

- (1) Name, address, and citizenship status of applicant;
- (2) Need for special action, including a description of any emergency or damage to equipment;
- (3) Type of operation to be conducted;

- (4) Purpose of operation;
- (5) Time and date of operation desired;
- (6) Class of station and nature of service;
- (7) Location of station and points with which station will communicate;
- (8) Equipment to be used, specifying manufacturer, model number, and number of units;
- (9) Frequency(s) desired.
- (10) Azimuth and beamwidth of major lobe of transmitting antenna and ERP;
- (11) Type of emission;
- (12) Description of antenna to be used, including height.
- (13) Certification that neither the applicant nor any party to the applicant is subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1988, as required by §1.2002 of this Chapter.

#### § 101.33 Who may sign applications.

See Part 1 of this chapter Sections 1.743 and 1.913, for practices and procedures governing signatures on applications, amendments and related statements of fact..

### Processing of Applications

#### § 101.35 Preliminary processing of applications.

(a) Applications received for filing are given a file number. The assignment of a file number to an application is for administrative convenience and does not indicate the acceptance of the application for filing and processing and does not preclude the subsequent return of the application.

(b) Applications that are incomplete with respect to answers, supplementary statements, execution, or other matters of a formal character will be considered defective and may be returned to the applicant with a brief statement as to such defects. If an applicant is requested by the Commission to file any additional documents or information not included in the prescribed application form, failure to comply with such request will be deemed to render the application defective, and such application may be dismissed. Applications will also be deemed to be defective and may be returned to the applicant in the following cases:

- (1) Statutory disqualification of applicant;
- (2) Proposed use or purpose of station would be unlawful;
- (3) Requested frequency is not allocated for assignment for the service proposed;

(4) The submitted filing fee (if required) is insufficient;

(5) The application does not demonstrate compliance with the special requirements applicable to the radio service involved;

(6) The applications does not include all necessary exhibits;

(7) The application fails to meet any other Commission requirements.

(c) Any application that has been returned to the applicant for correction will be processed in original order of receipt when resubmitted if it is received within 60 days from the date on which it was returned to the applicant and the change does not involve a major amendment. If the application is not resubmitted within the prescribed time, it will be treated as a new application and considered at the time other applications received on the same date are considered.

(d) Applications considered defective under paragraph (b) of this section may be accepted for filing if:

(1) The application is accompanied by a request which sets forth the reasons in support of a waiver of (or an exception to), in whole or in part, any specific rule, regulation, or requirement with which the application is in conflict; or

(2) The Commission, upon its own motion, waives (or allows an exception to), in whole or in part, any rule, regulation or requirement.

#### § 101.37 Public notice period.

(a) At regular intervals, the Commission will issue a public notice listing:

(1) The acceptance for filing of applications and major amendments thereto;

(2) Significant Commission actions concerning applications;

(3) The receipt of applications for minor modifications made pursuant to Sec. 101.59;

(4) Information which the Commission in its discretion believes of public significance;

and

(5) Special environmental considerations as required by Part 1 of this chapter.

(b) A public notice will not normally be issued for any of the following applications:

(1) For authorization of a minor technical change in the facilities of a proposed or authorized station where such a change would not be classified as a major amendment to a pending application, as defined by § 101.29, or as a minor modification to a license pursuant to § 101.59;

(2) For temporary authorization pursuant to § 101.31;

(3) For an authorization under any of the proviso clauses of section 308(a) of the Communications Act of 1934 (47 U.S.C. 308(a));

(4) For consent to an involuntary assignment or transfer of control of a radio authorization; or

(5) For consent to a voluntary assignment or transfer of control of a radio authorization, where the assignment or transfer does not involve a substantial change in ownership or control.

(c) Except as otherwise provided in this Part (e.g., Sec. 101.59), no application that has appeared on public notice will be granted until the expiration of a period of thirty days following the issuance of the public notice listing the application, or any major amendment thereto, or until the expiration of a period of thirty days following the issuance of a public notice identifying the tentative selectee of a random selection process, whichever is later.

(d) The listing of an application on public notice as accepted for filing does not indicate that the application has been found by the Commission to be acceptable for filing and does not preclude the subsequent return of the application.

#### § 101.39 Dismissal and return of applications.

(a) Except as provided under paragraph (d) of this Section and under § 101.41, any application may, upon written request, be dismissed without prejudice as a matter of right prior to the adoption date of any final Commission action or the application's designation for hearing or comparative evaluation.

(b) Applicants for stations licensed under Subpart H (Private Operational Fixed Microwave Service) may request the return of an application for correction without dismissal.

(c) A request to dismiss an application without prejudice will be considered after designation for hearing, after selection through the comparative evaluation procedure of § 101.51, or after selection as a tentative selectee in a random selection proceeding, only if:

(1) A written petition is submitted to the Commission and, in the case of applications designated for hearing or comparative evaluation, is properly served upon all parties of record;

(2) The petition is submitted before the issuance date of a public notice of Commission action denying the application; and

(3) The petition complies with the provision of § 101.41 (whenever applicable) and demonstrates good cause.

(d) Except as provided under § 101.41, an application designated for inclusion in the random selection process may be dismissed without prejudice as a matter of right if the applicant requests its dismissal at least 2 days prior to a random selection proceeding.

(e) Dismissal for failure to prosecute or for failure to respond to official correspondence or requests for additional information within a specified time period will be without prejudice prior to its designation for hearing, or tentative selection by the random selection process. Dismissal may be with prejudice after selection of the comparative evaluation process, or after selection as a tentative selectee in a random selection proceeding.

#### § 101.41 Ownership changes and agreements to amend or dismiss applications or pleadings.



(a) Except as provided in paragraph (b) of this section, applicants or any other parties in interest to pending applications must comply with the provisions of this section whenever:

(1) They participate in any agreement (or understanding) which involves any consideration promised or received, directly or indirectly, including any agreement (or understanding) for merger of interests or the reciprocal withdrawal of applications; and

(2) The agreement (or understanding) may result in either:

(i) A proposed substantial change in beneficial ownership or control (de jure or de facto) of an applicant such that the change would require, in the case of an authorized station, the filing of a prior assignment or transfer of control application under § 310(d) of the Communications Act of 1934 [47 U.S.C. § 310(d)], or

(ii) Proposed withdrawal, amendment or dismissal of any application(s), amendment(s), petition(s), pleading(s), or any combination thereof, which would thereby permit the grant without hearing, comparative evaluation under of Sec. 101.51, or random selection of an application previously in contested status.

(b) The provisions of this section will not be applicable to any engineering agreement (or understanding) that:

(1) Resolves frequency conflicts with authorized stations or other pending applications without the creation of new or increased frequency conflicts; and

(2) Does not involve any consideration promised or received, directly or indirectly (including any merger of interests or reciprocal withdrawal of applications), other than the mutual benefit of resolving the engineering conflict.

(c) For any agreement subject to this section, the applicant of an application which would remain pending pursuant to such an agreement will be considered responsible for the compliance by all parties with the procedures of this section. Failure of the parties to comply with the procedures of this section will constitute a defect in those applications which are involved in the agreement and remain in a pending status.

(d) The principals to any agreement or understanding subject to this section must comply with the standards of paragraph (e) of this section in accordance with the following procedure:

(1) Within ten (10) days after entering into the agreement, the parties thereto must jointly notify the Commission in writing of the existence and general terms of such agreement, the identity of all of the participants and the applications involved;

(2) Within thirty (30) days after entering into the agreement, the parties thereto must file any proposed application amendments, motions, or requests together with a copy of the agreement which clearly sets forth all terms and provisions, and such other facts and information as necessary to satisfy the standards of paragraph (e) of this section. Such submission must be accompanied by the certification by affidavit of each principal to the agreement declaring that the statements made are true, complete, and correct to the best of their knowledge and belief, and are made in good faith.

(3) The Commission may request any further information which in its judgment it